

IN THE CLAIMS

None of the pending claims have been amended. However, the entire set of the pending claims has been reproduced below for convenient reference by the Examiner.

1. (Previously Presented) A method, including:
transmitting, from a transmitter to a receiver, a first number of training symbols corresponding to a first number of communication chains to solicit a response including a second number of training symbols corresponding to a second number of communication chains; and
receiving, at the transmitter from the receiver, the second number of training symbols without requiring channel state information (CSI) feedback from the receiver.
2. (Original) The method of claim 1, wherein the first number of communication chains corresponds to a number of receive chains, and wherein the second number of communication chains corresponds to a number of transmit chains.
3. (Original) The method of claim 1, further including:
receiving a request to transmit at the first number of communication chains; and
determining a transmit power level and a receive gain level associated with the first number of communication chains.
4. (Previously Presented) The method of claim 3, further including determining multiple transmit power levels and receive gain levels associated with the first number of communication chains.
5. (Original) The method of claim 1, further including:
transmitting a clear to transmit response and the first number of training symbols from the first number of communication chains; and
calibrating a number of transmit and receive chains included in the first number of communication chains.

6. (Previously Presented) The method of claim 1, further including estimating a communications channel associated with the first number of communication chains based on the second number of training symbols.

7. (Original) The method of claim 1, wherein the first number of communication chains corresponds to a number of transmit chains, and wherein the second number of communication chains corresponds to a number of receive chains.

8. (Original) The method of claim 1, further including:
transmitting a request to transmit and the first number of training symbols; and
calibrating the first number of communication chains.

9. (Original) The method of claim 1, further including:
receiving a clear to transmit response and the second number of training symbols; and
estimating a channel associated with the first number of communication chains.

10. (Previously Presented) The method of claim 1, further including transmitting a header including a length specification corresponding to the first number of training symbols.

11. (Previously Presented) A method, including:
receiving, at a receiver from a transmitter, a first number of training symbols
corresponding to a first number of communication chains; and
transmitting, from the receiver to the transmitter, a second number of training symbols
corresponding to a second number of communication chains without sending channel state
information (CSI) feedback to the transmitter, in response to receipt of the first number of
training symbols.

12. (Original) The method of claim 11, wherein the first number of communication chains corresponds to a number of receive chains, and wherein the second number of communication chains corresponds to a number of transmit chains.

13. (Original) The method of claim 11, further including:
 - receiving a clear to transmit response and the first number of training symbols at the second number of communication chains; and
 - estimating a communications channel associated with the second number of communication chains based on the first number of training symbols
14. (Previously Presented) The method of claim 13, further including determining multiple transmit power levels and receive gain levels associated with the first number of communication chains.
15. (Original) The method of claim 11, further including:
 - transmitting the second number of training symbols and data; and
 - calibrating a number of transmit and receive chains included in the second number of communication chains based on the second number of training symbols.
16. (Original) The method of claim 11, wherein the first number of communication chains corresponds to a number of transmit chains, and wherein the second number of communication chains corresponds to a number of receive chains.
17. (Original) The method of claim 11, further including:
 - transmitting a clear to transmit response and the second number of training symbols; and
 - calibrating the second number of communication chains.
18. (Original) The method of claim 11, further including:
 - receiving a request to transmit and the first number of training symbols; and
 - estimating a channel associated with the second number of communication chains.
19. (Previously Presented) The method of claim 11, further including transmitting a header including a length specification corresponding to the second number of training symbols.

20. (Previously Presented) An article including a non-transitory machine-accessible medium having associated information stored therein, wherein the information, when accessed, results in a machine performing:

receiving, at a receiver from a transmitter, a first number of training symbols corresponding to a first number of communication chains; and

transmitting, from the receiver to the transmitter, a second number of training symbols corresponding to a second number of communication chains without sending channel state information (CSI) feedback to the transmitter, in response to receipt of the first number of training symbols.

21. (Original) The article of claim 20, wherein the information, when accessed, results in the machine performing:

receiving a clear to transmit response and the first number of training symbols at the second number of communication chains; and

estimating a communications channel associated with the second number of communication chains based on the first number of training symbols.

22. (Original) The article of claim 20, wherein the information, when accessed, results in the machine performing:

transmitting the second number of training symbols and data; and

calibrating a number of transmit and receive chains included in the second number of communication chains based on the second number of training symbols.

23. (Previously Presented) An article including a non-transitory machine-accessible medium having associated information stored therein, wherein the information, when accessed, results in a machine performing:

transmitting, from a transmitter to a receiver, a first number of training symbols corresponding to a first number of communication chains to solicit a response including a second number of training symbols corresponding to a second number of communication chains; and

receiving, at the transmitter from the receiver, the second number of training symbols without requiring channel state information (CSI) feedback from the receiver.

24. (Original) The article of claim 23, wherein the information, when accessed, results in the machine performing:

transmitting a request to transmit and the first number of training symbols; and
calibrating the first number of communication chains.

25. (Original) The article of claim 23, wherein the information, when accessed, results in the machine performing:

receiving a clear to transmit response and the second number of training symbols; and
estimating a channel associated with the first number of communication chains.

26. (Previously Presented) An apparatus, comprising:

a first number of communication chains to transmit to a device a first number of training symbols corresponding to the first number of communication chains and to receive a response from the device including a second number of training symbols corresponding to a second number of communication chains included in the device without requiring channel state information (CSI) feedback from the device.

27. (Original) The apparatus of claim 26, wherein the first number of communication chains corresponds to a number of transmit chains and the second number of communication chains corresponds to a number of receive chains.

28. (Previously Presented) The apparatus of claim 27, further including a calibration module to calibrate the number of transmit chains.

29. (Original) The apparatus of claim 26, wherein the first number of communication chains corresponds to a number of receive chains and the second number of communication chains corresponds to a number of transmit chains.

30. (Previously Presented) The apparatus of claim 29, further including an estimation module to estimate at least one channel associated with the number of receive chains.

31. (Previously Presented) A system, including:

a first device having a first number of communication chains to transmit a first number of training symbols corresponding to the first number of communication chains; and

a second device having a second number of communication chains to receive the first number of training symbols, and to respond by transmitting to the first device a second number of training symbols corresponding to the second number of communication chains, wherein the second device does not send channel state information (CSI) feedback to the first device for the transmitting.

32. (Original) The system of claim 31, further including:

a first number of antennas corresponding to the first number of communication chains; and

a second number of antennas corresponding to the second number of communication chains.

33. (Previously Presented) The system of claim 31, further including a calibration module to calibrate the first number of communication chains.

34. (Previously Presented) The system of claim 31, further including an estimation module included in the first device to estimate at least one channel associated with the first number of communication chains.

35. (Original) The system of claim 31, wherein the number of communication chains are capable of being coupled to a number of antennas to form a portion of a multiple-input, multiple-output (MIMO) system.

36. (Previously Presented) The apparatus of claim 27, further comprising a plurality of antennas, wherein each antenna is coupled to one of the number of transmit chains and one of the number of receive chains, wherein the transmit chain and the receive chain coupled to the antenna are not shared by other antennas.

37. (Previously Presented) The system of claim 31, wherein the first device comprises a plurality of antennas, wherein each antenna is coupled to a transmit chain and a receive chain associated with a corresponding one of the first number of communication chains, wherein the transmit chain and the receive chain coupled to the antenna are not shared by other antenna.